

BBBBBBBBBBBB		000000000		000000000		TTTTTTTTTTTT		SSSSSSSSSS
BBBBBBBBBBBB		000000000		000000000		TTTTTTTTTTTT		SSSSSSSSSS
BBBBBBBBBBBB		000000000		000000000		TTTTTTTTTTTT		SSSSSSSSSS
BBB	BBB	000	000	000	000	TTT	SSS	
BBB	BBB	000	000	000	000	TTT	SSS	
BBB	BBB	000	000	000	000	TTT	SSS	
BBB	BBB	000	000	000	000	TTT	SSS	
BBB	BBB	000	000	000	000	TTT	SSS	
BBB	BBB	000	000	000	000	TTT	SSS	
BBB	BBB	000	000	000	000	TTT	SSS	
BBBBBBBBBBBB		000	000	000	000	TTT	SSS	
BBBBBBBBBBBB		000	000	000	000	TTT	SSS	
BBBBBBBBBBBB		000	000	000	000	TTT	SSS	
BBB	BBB	000	000	000	000	TTT	SSS	
BBB	BBB	000	000	000	000	TTT	SSS	
BBB	BBB	000	000	000	000	TTT	SSS	
BBB	BBB	000	000	000	000	TTT	SSS	
BBB	BBB	000	000	000	000	TTT	SSS	
BBB	BBB	000	000	000	000	TTT	SSS	
BBBBBBBBBBBB		000000000		000000000		TTT	SSSSSSSSSS	
BBBBBBBBBBBB		000000000		000000000		TTT	SSSSSSSSSS	
BBBBBBBBBBBB		000000000		000000000		TTT	SSSSSSSSSS	

```

LL          IIIIII          SSSSSSSS
LL          IIIIII          SSSSSSSS
LL          II             SS
LL          II             SS
LL          II             SS
LL          II             SS
LL          II             SSSSSS
LL          II             SSSSSS
LL          II             SS
LL          II             SS
LL          II             SS
LL          II             SS
LLLLLLLLLLLL IIIIII          SSSSSSSS
LLLLLLLLLLLL IIIIII          SSSSSSSS

```

(2)	56	DECLARATIONS
(3)	85	Main routine
(3)	123	EXIT_HANDLER

```

0000 1      .TITLE  SYSGENMN - SYSGEN UTILITY MAIN ROUTINE
0000 2      .IDENT  'V04-000'
0000 3
0000 4
0000 5
0000 6
0000 7      *
0000 8      * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
0000 9      * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
0000 10     * ALL RIGHTS RESERVED.
0000 11     *
0000 12     * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
0000 13     * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
0000 14     * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
0000 15     * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
0000 16     * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
0000 17     * TRANSFERRED.
0000 18     *
0000 19     * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
0000 20     * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
0000 21     * CORPORATION.
0000 22     *
0000 23     * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0000 24     * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 25     *
0000 26     *
0000 27     *
0000 28     *
0000 29     *+
0000 30     * FACILITY:      SYSGEN
0000 31     *
0000 32     * ABSTRACT:
0000 33     *   This module contains the main routine for the SYSGEN utility.
0000 34     *
0000 35     * ENVIRONMENT:  USER, EXEC, AND KERNEL MODES
0000 36     *
0000 37     * AUTHOR:   STEVE BECKHARDT,      CREATION DATE:  19-SEP-1979
0000 38     *           (ORIGINAL AUTHOR - LEN KAWELL)
0000 39     *
0000 40     * MODIFIED BY:
0000 41     *
0000 42     *   V03-004 WHM0001      Bill Matthews      20-May-1983
0000 43     *   Do an implicit SET/OUTPUT=SYS$OUTPUT: in order to detect whether
0000 44     *   or not SYS$OUTPUT is a terminal.
0000 45     *
0000 46     *   V03-003 MSH0003      Maryann Hinden      13-Jul-1983
0000 47     *   No echo argument to BOO$GETPARAM.
0000 48     *
0000 49     *   V03-002 MSH0002      Maryann Hinden      03-Jun-1983
0000 50     *   Fix lock id specification for exit handler.
0000 51     *
0000 52     *   V03-001 MSH0001      Maryann Hinden      10-June-1983
0000 53     *   Move PUTERROR to separate module.
0000 54     *--

```



```

0000 56      .SBTTL  DECLARATIONS
0000 57      :
0000 58      : INCLUDE FILES:
0000 59      :
0000 60      :
0000 61      :
0000 62      : MACROS:
0000 63      :
0000 64      :
0000 65      :          $CLIDEF                      ; DEFINE CLI CODES AND VALUES
0000 66      :
0000 67      :
0000 68      : EQUATED SYMBOLS:
0000 69      :
0000 70      :
0000 71      :
0000 72      : OWN STORAGE:
0000 73      :
00000000 0000 74 EXIT_BLOCK:      .LONG  0                      ; Data block for exit handler
0000007E 0004 75                  .LONG  EXIT_HANDLER
00000001 0008 76                  .LONG  1
00000010 000C 77                  .LONG  EXIT_STATUS
00000014 0010 78 EXIT_STATUS:    .BLKL  1
0014 79
3A 54 55 50 54 55 4F 24 53 59 53 00 0014 80 OUTFILE:      .ASCII  /SYS$OUTPUT:/
0B 0014
0020 81
0020 82
00000000 83      .PSECT  PAGED_CODE      rd,nowrt,exe,long

```

```

0000 85      .SBTTL Main routine
0000 86      :++
0000 87      : Functional Description:
0000 88      : SYSGEN is the control module for the sysgen utility program which
0000 89      : provides functional commands for the creation, examination and
0000 90      : editing of parameter files, the creation of I/O data base and the loading
0000 91      : of device drivers.
0000 92      :
0000 93      : Calling Sequence:
0000 94      : CALLG ARGLIST,BOO$SYSGEN          called by the image activator
0000 95      :
0000 96      : Input Parameters:
0000 97      :
0000 98      : Output Parameters:
0000 99      :
0000 100     :--
0000 101     BOO$SYSGEN:: .WORD 0
0002 102     $LKWSET_S    INADR=BOO$GQ_LIMITS,-      ; Lock entire image in working set
0002 103     RETADR=BOO$GQ_RETADR      ; EXIT IF ERROR LOCKING PAGES, FATAL
0017 104     BLBC      R0,10$          desblk = EXIT_BLOCK      ; Declare exit handler
001A 105     $DCLEXH_S    ; Exit if can't do it
0027 106     BLBC      R0,10$          ; Null call back arguments
002A 107     CLRQ      -(SP)          ; Address of request block
002C 108     PUSHAB    L^BOO$AL_CLIBLK ; Call utility service routine
0032 109     CALLS     #3,@CLISX UTILSERV(AP) ; Foreign command?
0036 110     CMPB      #CLISK_VERB_FORE,L^BOO$AL_CLIBLK+CLISB_RQSTAT ; Branch if yes
003E 111     BEQL      5$             ; Clear command string descriptor
0040 112     CLRQ      L^BOO$GQ_CMDESC ; Use ACTIVE parameters
0046 113     5$:      CALLS     #0,BOO$USEACT ; Set file length of SYSS$OUTPUT:
004D 114     MOVB      OUTFILE,G^BOO$GB_FILELEN; Set file address of SYSS$OUTPUT:
0058 115     MOVAB     OUTFILE+1,G^BOO$GL_FILEADDR; Do a SET/OUTPUT=SYSS$OUTPUT: command
0063 116     CALLS     #0,BOO$SET_OUTPUT ; READ AND PROCESS COMMANDS
006A 117     CALLS     #0,L^BOO$GETPARAM ; CHECK FOR END OF FILE
0071 118     CMPL      #RMSS_EOF,R0    ; NO, RETURN STATUS
0078 119     BNEQ      10$             ; SET NORMAL STATUS
007A 120     MOVL      #1,R0
007D 121     10$:     RET

```

```

007E 123      .SBTTL EXIT_HANDLER
007E 124      :++
007E 125      :
007E 126      PURPOSE
007E 127      Dequeue SYSGEN database lock - if being held.
007E 128      :
007E 129      INPUT
007E 130      BOO$LOCK_ID - identification of database lock.
007E 131      :
007E 132      OUTPUT
007E 133      Lock is dequeued.
007E 134      :
007E 135      :--
007E 136      :
0000 007E 137      .ENTRY EXIT_HANDLER, ^M<>
0080 138
50 0000'8F 3C 0080 139 10$: $CMEXEC_S      routin=DQLOCK
04 008F 140      MOVZWL #SS$_NORMAL,R0
0094 141      RET
0095 142
0095 143      :
0095 144      : Exec mode routine to dequeue locks
0095 145      :
0000 0095 146      .ENTRY DQLOCK,^M<>
0097 147
04 0097 148      $DEQ_S lkid = BOO$LOCK_ID
00A8 149      RET
00A9 150
00A9 151
00A9 152      .END BOO$SYSGEN

```


\$BT1	= 00000001		
BOOSAL_CLIBLK	*****	X	03
BOOSGB_FILELEN	*****	X	03
BOOSGETPARAM	*****	X	03
BOOSGL_FILEADDR	*****	X	03
BOOSGO_CMDESC	*****	X	03
BOOSGO_LIMITS	*****	X	03
BOOSGO_RETADR	*****	X	03
BOOSLOCK_ID	*****	X	03
BOOSSET_OUTPUT	*****	X	03
BOOSYSGEN	00000000	RG	03
BOOSUSEACT	*****	X	03
CLISA_UTILSERV	= 00000008		
CLISB_RQSTAT	= 00000003		
CLISK_VERB_FORE	*****	X	03
DQLOCK	00000095	RG	03
EXIT_BLOCK	00000000	R	01
EXIT_HANDLER	0000007E	RG	03
EXIT_STATUS	00000010	R	01
OUTFILE	00000014	R	01
RMSB_EOF	*****	X	03
SSB_NORMAL	*****	X	03
SYSSCMEXEC	*****	GX	03
SYSSDCLEXH	*****	GX	03
SYSSDEQ	*****	GX	03
SYSSLKWSET	*****	GX	03

! Psect synopsis !

PSECT name	Allocation	PSECT No.	Attributes														
. ABS .	00000000 (0.)	00 (0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE				
. BLANK .	00000020 (32.)	01 (1.)	NOPIC	USR	CON	REL	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE				
\$ABSS	00000000 (0.)	02 (2.)	NOPIC	USR	CON	ABS	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE				
PAGED_CODE	000000A9 (169.)	03 (3.)	NOPIC	USR	CON	REL	LCL	NOSHR	EXE	RD	NOWRT	NOVEC	LONG				

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
-----	-----	-----	-----
Initialization	29	00:00:00.08	00:00:00.65
Command processing	107	00:00:00.68	00:00:04.81
Pass 1	165	00:00:02.40	00:00:07.26
Symbol table sort	0	00:00:00.27	00:00:00.77
Pass 2	44	00:00:00.60	00:00:00.84
Symbol table output	4	00:00:00.04	00:00:00.07
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	353	00:00:04.09	00:00:14.42

The working set limit was 1200 pages.
11616 bytes (23 pages) of virtual memory were used to buffer the intermediate code.
There were 20 pages of symbol table space allocated to hold 212 non-local and 3 local symbols.

152 source lines were read in Pass 1, producing 20 object records in Pass 2.
14 pages of virtual memory were used to define 13 macros.

! Macro library statistics !

Macro library name	Macros defined
-----	-----
\$255\$DUA28:[BOOTS.OBJ]BOOTS.MLB;1	0
\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	0
\$255\$DUA28:[SYSLIB]STARLET.MLB;2	10
TOTALS (all libraries)	10

293 GETS were required to define 10 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$;SYSGENMN/OBJ=OBJ\$;SYSGENMN MSRC\$;SYSGENMN/UPDATE=(ENH\$;SYSGENMN)+EXECMLS/LIB+LIB\$;BOOTS.MLB/LIB

0041 AH-BT13A-SE
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION
CONFIDENTIAL AND PROPRIETARY